



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/669,879	09/27/2000	Jen-Kai Chen	SUND 152	4534

23995 7590 01/30/2004

RABIN & Berdo, PC  
1101 14TH STREET, NW  
SUITE 500  
WASHINGTON, DC 20005

EXAMINER
----------

EUGENE, WANDA

ART UNIT	PAPER NUMBER
----------	--------------

2666

DATE MAILED: 01/30/2004

A

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/669,879

Applicant(s)

CHEN ET AL.

Examiner

Wanda Eugene

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the FIFO block in relation to the output queue must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 1 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the question is raised in regards of the physical relationship of the port output queue, global output queue and the FIFO block. It is unclear if it is the applicant's invention to utilize the FIFO blocks in the capacity of either a port output queue or a global output queue; or functioning as a buffer controller amongst the two. The applicants attempt to further limit claim 1 with reference to "setting the first field

and the second field of *a last one of* the first FIFO node in each port output queue (pg 27 line 14-15)" is unclear.

4. Claims 2-11 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claim 12 rejected under 35 U.S.C. 102(b) as being anticipated by Dahlgren.

Regarding claim 12, Dahlgren teaches an output queuing method for forwarding packets in a switch network, the switch network containing a plurality of port, each port corresponding to a port output queue (**a local area network switch in accordance with the present invention includes input and output ports for receiving and transmitting broadcast and unicast data transmission from and to corresponding network stations and a crosspoint switch for selectively routing data transmissions between ports** col. 2 lines 35-39), a global output queue shared by all port output queues (**all output ports share a second broadcast link to the crosspoint switch** col. 2 lines 45-46), the packets being of the type of unicast or multicast, the output queuing method comprising: detecting the type of a receiving packet; if the type of

the receiving packet is unicast, allocating the receiving packet into the port output queue (switch 12 routes each unicast data packet arriving on one of input line V1-V23 to the appropriate output port its corresponding switch output lines fig 1; col. 3 lines 64-67); if the type of the receiving packet is multicast, allocating the receiving packet into the global output queue (a broadcast packet arriving at an input port from a source station includes routing data to broadcast output line col. 4 lines 5-27); and determining to de-queue or skip the receiving packet in the global output queue according to the type of the receiving packet (system supervisor supplies address mapping system 26 with data assigning the network stations to various virtual networks, switch 10 forwards both unicast and multicast only to destination networks stations included in the same virtual network as the sources station col. 5 lines 11-45).

### ***Conclusion***


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a. Honig et al. (U.S. 6574232 B1) Crossbar switch utilizing broadcast buffer and associated broadcast buffer management unit
  - b. Adam et al. (U.S. 6,320,861 B1) Hybrid scheme for queuing in a shared memory ATM switch buffer
  - c. Huang et al. (U.S. 6,363,075 B1) Shared buffer management mechanism and method using multiple linked lists in a high speed packet switching system
  - d. Lebizay et al. (U.S. 5,602,841) Efficient point-to-point and multi-point routing mechanism for programmable packet switching transmission networks

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wanda Eugene whose telephone number is 703-305-8978. The examiner can normally be reached on M-F 7am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q Ngo can be reached on 703-305-4798. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-3900.

we

  
RICKY NGO  
PRIMARY EXAMINER